





PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

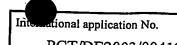
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 2002P11389WO	FOR FURTHER ACTION	See Notif Preliminary	ication of Transmittal of International Examination Report (Form PCT/IPEA/416)			
International application No. PCT/DE2003/004127	International filing date (day 15 December 2003 (1.	/month/year)	Priority date (day/month/year) 19 December 2002 (19.12.2002)			
International Patent Classification (IPC) or na G01N 33/543, C12Q 1/68	itional classification and IPC		10 2 000 moor 2002 (19.12.2002)			
Applicant Si	EMENS AKTIENGESI	ELLSCHAF	T			
This international preliminary examinand is transmitted to the applicant accurate.	nation report has been prepare cording to Article 36.	d by this Intern	national Preliminary Examining Authority			
2. This REPORT consists of a total of _	4 sheets, includi	ng this cover s	heet.			
This report is also accompanie amended and are the basis for t 70.16 and Section 607 of the A	d by ANNEXES, i.e., sheets of this report and/or sheets conta dministrative Instructions und	f the description	on, claims and/or drawings which have been tions made before this Authority (see Rule			
These annexes consist of a tota						
3. This report contains indications relating	ig to the following items:					
I Basis of the report						
II Priority						
III Non-establishment of	opinion with regard to novelty	, inventive ster	and industrial applicability			
IV Lack of unity of invent		•	and approaching			
Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;						
VI Certain documents cite						
VII Certain defects in the in	nternational application					
VIII Certain observations on	the international application					
Date of submission of the demand 08 July 2004 (08.07.2004)		completion of t	his report			
			gust 2005 (26.08.2005)			
Name and mailing address of the IPEA/EP	Authoriz	ed officer				
acsimile No.	Telephor	ie No.				

Form PCT/IPEA/409 (cover sheet) (July 1998)



INTERNATIONAL PRELIMINARY EXAMINATION REPORT



I. Bas	sis of the re	Port	PCT/DE2003/004127
T. W	un regard to	the elements of the international application:*	
		mational application as originally filed	
	the desc	ription:	
	pages	1-14	an ariai . II . an
	pages .		, as originally filed
	pages	, filed with the lette	, filed with the demand
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	pages	1.10	
	pages	1-12	, as originally filed
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	pages	E1_1 14 14 1	, filed with the demand
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	pages _	1/7-7/7	, as originally filed
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Ш	the sequen	ce listing part of the description:	
	pages _		
	pages		
	pages _	, filed with the letter	, filed with the demand
<u></u>	or 55.3).	age of publication of the international application (under Rule 48.3(b)). age of the translation furnished for the purposes of international prelim	
With prelim		any nucleotide and/or amino acid sequence disclosed in the int nination was carried out on the basis of the sequence listing:	ernational application, the international
H	contained	in the international application in written form.	
님	filed toge	her with the international application in computer readable form.	
H	rurnished	subsequently to this Authority in written form.	
H	furnished	subsequently to this Authority in computer readable form.	
	The state internation	ment that the subsequently furnished written sequence listing does all application as filed has been furnished	not go beyond the disclosure in the
	The states been furni	nent that the information recorded in computer readable form is ident shed.	ical to the written sequence listing has
		lments have resulted in the cancellation of:	
	the the	description, pages	
	the	claims, Nos.	
	the	drawings, sheets/fig	
	This report	has been set all the decision of the second	
Renlac	beyond the	has been established as if (some of) the amendments had not been made disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	, since they have been considered to go
	ement shee report as .17).	is which have been furnished to the receiving Office in response to an im "originally filed" and are not annexed to this report since they do	vitation under Article 14 are referred to not contain amendments (Rule 70 16
	ement shee report as .17).	- t (-tuto / 0.2(C)).	vitation under Article 14 are referred to not contain amendments (Rule 70 16

V.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
,	Statement

1.	Statement			
	Novelty (N)	Claims	3-6,9,10,12	YES
		Claims	1,2,7,8,11	NO
	Inventive step (IS)	Claims		YES
		Claims	1-12	NO
	Industrial applicability (IA)	Claims	1-12	YES
		Claims		NO

Citations and explanations

1. This report makes reference to the following documents:

D1: WO 00/62047.

D1 is the closest prior art and discloses a DNA chip 2. with a carrier and, arranged thereon, a microarray of spots containing immobilized catcher molecules, each spot containing a microelectrode system for impedance spectroscopy detection of binding events. The electrode system consists, for example, of two thin-layer electrode pairs that can be configured as annular or interdigital electrodes (cf. figure 2). Although these electrode pairs are not used as polarization and sensor electrodes like they are in the present application, the subject matter of claim 1 relates to the DNA chip itself and also encompasses the chip according to D1. The electrode pairs according to D1 would also be suitable for generating an alternating electromagnetic field or for measuring a voltage drop in the analyte, provided that the electrode pairs are connected to an AC power source or a voltmeter. Therefore, claim 1 does not meet the requirements of PCT Article

33(2).

- 3. The features of claims 2, 7, 8 and 11 are likewise known from D1 (cf. pages 12, 20, 23 and 28) and therefore make no inventive contribution to the claims to which they refer (PCT Article 33(2)).
- 4. It cannot currently be determined for what technical problem the features of the other independent claims could represent an inventive solution. Therefore, these features appear to be a matter of standard practice in the art.
- 5. Industrial applicability is acknowledged (PCT Article 33(4)).